

OKLAHOMA CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION
P.O. BOX 52000
OKLAHOMA CITY, OK 73152-2000
(Rule 165:10-3-1)

API NUMBER: 109 22434

Approval Date: 10/16/2014
Expiration Date: 04/16/2015

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 33 Twp: 14N Rge: 4W

County: OKLAHOMA

SPOT LOCATION: SW SW SE SE

FEET FROM QUARTER: FROM SOUTH FROM EAST

SECTION LINES: 197 1098

Lease Name: WARSAW

Well No: 33-3H

Well will be 1098 feet from nearest unit or lease boundary.

Operator Name: GASTAR EXPLORATION INC

Telephone: 7137391800; 4057221

OTC/OCC Number: 23199 0

GASTAR EXPLORATION INC
1331 LAMAR STE 650
HOUSTON, TX 77010-3131

JAY L WADE TRUST & JANNA L HEFLEY-WADE TRUST
16605 N MACARTHUR BLVD
EDMOND OK 73012

Formation(s) (Permit Valid for Listed Formations Only):

Name	Depth	Name	Depth
1 HUNTON	6720	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 20212

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 13500

Ground Elevation: 1100

Surface Casing: 790

Depth to base of Treatable Water-Bearing FM: 740

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: No

PIT 1 INFORMATION

Approved Method for disposal of Drilling Fluids:

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 5000 Average: 3000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N

Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: SALT PLAINS

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-28415
H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

This permit does not address the right of entry or settlement of surface damages.

The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

HORIZONTAL HOLE 1

Sec 10 Twp 13N Rge 4W County OKLAHOMA

Spot Location of End Point: NW SE NW NE

Feet From: SOUTH 1/4 Section Line: 1739

Feet From: WEST 1/4 Section Line: 701

Depth of Deviation: 6300

Radius of Turn: 445

Direction: 120

Total Length: 6500

Measured Total Depth: 13500

True Vertical Depth: 6848

End Point Location from Lease,
Unit, or Property Line: 619

Notes:

Category

Description

SPACING - 20212

10/16/2014 - G91 - (UNIT) 33-14N-4W & 4-13N-4W, W2, W2 E2 3-13N-4W, W2, W2 E2, SE4 NE4,
SE4 NE4 10-13N-4W
EST WEST EDMOND HUNTON LIME UNIT FOR HUNTON